AMENDMENTS TO THE CLAIMS:

The following list of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended): A process for preparing an established avian embryonic germ (EG) cell line, which comprises the steps of:

(a) culturing primordial germ cells (PGCs) isolated from a gonad of an avian embryo at a stage ranging from ~~20 to 36~~ 14 to 36 with a feeder layer in a medium supplemented with a cell growth factor and a differentiation inhibitory factor for a period of time sufficient to ~~produce a cell population of PGCs containing~~ obtain EG cell colonies;

(b) culturing the ~~cell population of PGCs containing~~ EG cells contained in said EG cell colonies in a medium supplemented with the cell growth factor and the differentiation inhibitory factor as in step (a) ~~with a mitotically active~~ by employing a feeder layer ~~until the EG cells are colonized~~ for a period of time sufficient to ~~preferentially obtain~~ produce EG cell colonies; and

(c) recovering and subculturing ~~the~~ EG cells contained in said EG cell colonies of step (b) in a medium supplemented with the cell growth factor and the differentiation inhibitory factor as in step (a) with a ~~mitotically active~~ feeder layer for a period of time sufficient to establish the EG cell line consisting essentially of

undifferentiated avian cells expressing ~~avian~~ EG cell characteristics, wherein the undifferentiated avian cells of the EG cell line expressing ~~avian~~ EG cell characteristics are stained with Periodic Acid-Shiff's (PAS) reagent, are reactive to anti-SSEA-1 antibody, show substantially no alkaline phosphatase activity, form an embryoid body in the absence of a differentiation inhibitory factor, are capable of differentiating into various cell types and when injected to a recipient egg, a chimera expressing the EG cell phenotype is produced.

2-3. (canceled).

4. (original): The process of claim 1, wherein the avian species is turkey, chicken, quail, pheasant or duck.

5. (currently amended): The process of claim 1, wherein the feeder layer used in step (a) is a layer of germinal ridge stroma cells (GRSCs) ~~present in the gonad of the avian embryo at a stage ranging from 20 to 36~~.

6. (original): The process of claim 1, wherein the growth factor is selected from the group consisting of stem cell factor (SCF), basic fibroblast growth factor (bFGF), interleukin-11 (IL-11), insulin-like growth factor-I (IGF-I) and a mixture thereof.

7. (previously presented): The process of claim 1, wherein the growth factor is selected from the group consisting of 0.05 to 500 ng/ml of SCF, 0.1 to 1000 ng/ml of bFGF, 0.0004 to 4 ng/ml of IL-11, 0.1 to 1000 ng/ml of IGF-I and a mixture thereof.

8. (original): The process of claim 1, wherein the differentiation inhibitory factor is leukemia inhibitory factor (LIF).

9. (original): The process of claim 8, wherein the amount of LIF is 0.1 to 1000 units/ml.

10. (original): The process of claim 1, wherein the medium further comprises mammalian or avian serum.

11. (original): The process of claim 1, wherein the medium further comprises a supplementary ingredient selected from the group consisting of sodium pyruvate, glutamine, ß-mercaptoethanol and a mixture thereof.

12. (canceled).

13. (currently amended): The process of claim 1, wherein the feeder layer in steps b and/or (c) is fibroblast.

14. (original): The process of claim 13, wherein the fibroblast is avian fibroblast or avian embryonic fibroblast.

15. (original): The process of claim 14, wherein the avian species is chicken.

16. (withdrawn): An avian embryonic germ (EG) cell line prepared in accordance with the process of claim 1.

17. (withdrawn): The avian EG cell line of claim 16, which can be maintained by repeated subculture.

18. (withdrawn): The avian EG cell line of claim 16, which expresses SSEA-1 antigen, forms an embryoid body, and differentiates and contributes to various tissues.

19. (withdrawn): The avian EG cell line of claim 16, which is a chicken embryonic germ cell line having characteristics substantially identical to that deposited under the accession number of KCLRF-BP-00026.

20. (withdrawn): A process for preparing a somatic or germline chimera comprising injecting the avian EG cell of claim 16 into an egg.

21. (withdrawn): The process of claim 20, wherein the EG cell is injected into a germinal cavity or blood vessel of the egg.

22. (withdrawn): The process of claim 21, wherein the EG cell is injected into the germinal cavity of the egg at a stage X.

23. (withdrawn): The process of claim 21, wherein the EG cell is injected into the blood vessel of the egg at a stage ranging from 13 to 17.

24. (withdrawn): A process for transfecting a foreign gene into EG cells or PGCs characterized by using electroporation or liposome.

25. (withdrawn): A process for selecting stably transfected EG cells or PGCs comprising passaging EG cells transfected by a foreign gene in a medium containing an antibiotic.

26. (canceled).

27. (new): The process of claim 1, wherein the avian embryonic gonad is at a stage ranging from 24 to 30.

28. (new): The process of claim 1, wherein the feeder layer employed in steps (b) and/or (c) is mitotically active.

29. (new): A process for preparing an established avian embryonic germ (EG) cell line, which comprises the steps of:

(a) culturing primordial germ cells (PGCs) isolated from a gonad of an avian embryo at a stage ranging from 24 to 30 by employing a layer of germinal ridge stroma cells (GRSCs) as a feeder layer in a medium supplemented with a cell growth factor and leukemia inhibitory factor (LIF) for a period of time sufficient to obtain EG cell colonies, wherein the growth factor comprises IL-11 and IGF-I as an essential ingredient for the survival and proliferation of EG cells;

(b) culturing EG cells contained in said EG cell colonies in a medium supplemented with the cell growth factor and leukemia inhibitory factor (LIF) as in step (a) by employing a mitotically active feeder layer for a period of time sufficient to produce EG cell colonies, wherein the growth factor comprises IL-11 and IGF-I as an essential ingredient for the survival and proliferation of EG cells; and

(c) recovering and subculturing EG cells contained in said EG cell colonies of step (b) in a medium supplemented with the cell growth factor and leukemia inhibitory factor (LIF) as in step (a) with a mitotically active feeder layer for a period of time sufficient to establish the EG cell line consisting essentially of undifferentiated avian cells expressing EG cell characteristics, wherein the growth factor comprises IL-11 and IGF-I as an essential ingredient for the survival and proliferation of EG cells, and wherein the undifferentiated avian cells of the EG cell line expressing EG cell characteristics are stained with Periodic Acid-Shiff's (PAS) reagent, are reactive to anti-SSEA-1 antibody, show substantially no alkaline phosphatase activity, form an embryoid body in the absence of a differentiation inhibitory factor, are capable of differentiating into various cell types and when injected to a recipient egg, a chimera expressing the EG cell phenotype is produced.

30. (new): The process of claim 29, wherein the avian species is turkey, chicken, quail, pheasant or duck.

31. (new): The process of claim 29, wherein the growth factor further comprises stem cell factor(SCF), basic fibroblast growth factor(bFGF) or a mixture thereof.

32. (new): The process of claim 29, wherein the amount of IL-11 is from 0.0004 to 4 ng/ml and the amount of IGF-I is from 0.1 to 1000 ng/ml.

33. (new): The process of claim 31, wherein the amount of SCF is from 0.05 to 500 ng/ml and the amount of bFGF is from 0.1 to 1000 ng/ml.

34. (new): The process of claim 29, wherein the amount of LIF is 0.1 to 1000 units/ml.

35. (new): The process of claim 29, wherein the medium further comprises mammalian or avian serum.

36. (new): The process of claim 29, wherein the medium further comprises a supplementary ingredient selected from the group consisting of sodium pyruvate, glutamine, β-mercaptoethanol and a mixture thereof.

37. (new): The process of claim 29, wherein the feeder layer employed in step (b) and/or (c) is fibroblast.

38. (new): The process of claim 37, wherein the fibroblast is avian fibroblast or avian embryonic fibroblast.

39. (new): The process of claim 38, wherein the avian species is chicken.